Inside Wallops

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Goddard Space Flight Center
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NASA's RadSTAR-A Completes First Phase on the P3 Aircraft

by Sarah Brinton, Salisbury University Student Intern

NASA's Range and Mission Management Office and the Aircraft Office at Wallops Flight Facility has completed the first-phase of the Radiation Synthetically Thinned Aperture Radar-Active, (RadSTAR-A) project.

This airborne radar instrument, recently developed at NASA Goddard Space Flight Center, is designed to scan the surface of the earth to collect information about soil moisture, forest canopy and the ocean salinity.

The RadSTAR-A consists of several advanced computer systems, a display station and an antenna system.

The antenna, about three cubic meters in size, is positioned on the Bombay of the NASA P-3 aircraft. The instrument puts out 10 watts of radar power.

The radar signal bounces off the earth's surface, returns to the antenna, and is processed into science information by the computers.

George Postell, NASA Aircraft Office and Rich Rogers, NASA Aviation Safety Officer, were the co-pilots for this flight. Michael Singer, AIRTC, was the pilot in command.

The NASA aircraft team flew the P-3 all over the Delmarva Peninsula to test this state-of-the-art technology.

The major goals for this project were to test how the instrument actually worked in an aircraft environment, collect data on the Delmarva Peninsula and turn the recorded data into maps. RadSTAR-A has been tested in laboratories, but these were the first aircraft flights.

The ultimate goal is to use RadSTAR-A to test NASA spacecraft or satellite stems, and someday fly as a science instrument in space.

The first flights of the project were very successful. Principal investigator, Dr. Peter Hildebrand of the Hydrospheric and Biospheric Sciences Laboratory at Goddard Space Flight Center said, "I want to express our sincere appreciation for the absolutely flawless support that we received from the Wallops Flight Facility and from all persons associated with the P-3 support of our flight program."

NASA photo

(left to right) Richard Aldridge, SGT; Rafael Rincon, NASA GSFC; Joe Ruffing, NASA Wallops; and Prasad Hanagud, NASA Wallops prepare to install RadSTAR-A into the aircraft.

John Valliant, Computer Sciences Corporation, was the project manager for this operation. He sees great potential for this in the future.

NASA plans to fly the same instrument for further testing this fall.

A Successful Launch for Visually Impaired Students

Photo by John Valliant

A group of 12 visually impaired or blind high school students on the National Federation of the Blind (NFB) team launched their ½ Scale Patriot rocket from Wallops Island at just after 6 a.m. on July 19.

The vehicle performed well and was recovered by the Coast Guard Auxiliary (pictured). Both parachute systems functioned as designed. The payload, rocket, and parachute were returned to the NFB team at Wallops and made available for inspection at the 9 a.m. post mission briefing.

The students were participating in a week long rocket science camp at the federation's Jernigan Institute in Baltimore, Md., and NASA's Wallops Flight Facility.

Did You Know NASA Goddard and Wallops Do Hurricane Research?

The Office of Public Affairs recently launched an outreach campaign to media, schools, museums, and the general public to let them know what research is being done on hurricanes at the Goddard Space Flight Center.

To learn more about Goddard's role in hurricane research, visit http://www.nasa.gov/hurricane

Check out video/animations, satellite images, research, hurricane science, education links and meet the experts.

NASA's Scientific Visualization Studio created the video "27 Storms: Arlene to Zeta" a chronicle of 2005's storms-now available on the hurricane page.

Display Your Badge

All employees and visitors are reminded while on the Main Base and Island to wear/display your badge at or above the waistline. Badges should not be stored in pockets, purses, wallets, or left in vehicles while conducting business on the Main Base or the Island. Individuals failing or refusing to comply after a courteous reminder should be reported to a Security Force representative at x1111.

Revised Form for Excessing Non-controlled Government Property

The Goddard Space Flight Center, (GSFC), Form 20-9, Report of Excess Property, for non-controlled government property has been revised.

The blocks pertaining to artifacts, space hardware, historical items and hazardous material must be checked "Yes" or "No."

Non-controlled property may be excessed by completing steps 1 and 2 below. The property custodian completes step 3. The property will be picked up within 15 working days from the time the documents are received.

Step 1: Identify idle or unused equipment. Note the model and serial numbers, the manufacturer, voltage requirements, and dimensions and weight.

Step 2: Fill in all data fields of the GSFC Form 20-9

Step 3: Forward completed form to Disposal/Excess at Greenbelt: print the form, sign and date it, and fax it to the Disposal Warehouse at x66-0255 or send it as an E-mail attachment to Janice.L.Woodfork.1@gsfc.nasa.gov and Diane.C.Goddard.1@gsfc.nasa.gov. Indicate in the body of the E-mail that property listed on the attached document is to be excessed.

All copies of form GSFC-20-9 with revision dates prior to April 2006 should be destroyed. The new form is available at http://code235/forms/forms.html, http://aetdoasis.gsfc.nasa.gov/index.php?newID=66&child=child, or http://gdms.gsfc.nasa.gov/gdmsnew/home.jsp.

Call Terry Ewell at x1133 if you have any questions.

Wallops Shorts.....

Launches

A NASA Improved Orion sounding rocket was launched from White Sands Missile Range, N.M., on July 21. A second Improved Orion was launched four hours later. John Winstead of the Naval Air Warfare Center was the principal investigator for the reimbursable missions. Rick Evavold, NASA Sounding Rocket Operations Contract, (NSROC), was the mission manger.

On the Road

NASA Range and Mission Management Office personnel staffed an exhibit at the J. Millard Tawes Memorial Crab and Clam Bake in Crisfield, Md., on July 19. They talked with numerous citizens and business representatives about the benefits Wallops brings to the local economy, capabilities, and opportunities.

On July 18, Magdi Said, NASA Balloon Program Office, and Gabe Garde, New Mexico State University, Physical Science Laboratory, presented an overview of the balloon program with a series of hands-on-activities that demonstrated the concepts of volume measurements, buoyancy and ascent rate to 75 middle school students from around the country. The students were participating in a two week residential summer camp at the University of Maryland, Eastern Shore.

EAP Lunch & Learn

Living Through Life Transitions

with Tom Northern

July 27
11:30a.m. – 12:30 p.m.
Williamsburg Room – Bldg E-2

Participants will discuss:
- viewing change as a challenge,
- typical reactions to change and loss,
- living through birth,
- death,
- job changes,
- separations and other rites of passage.

Inside Wallops is an official publication of Goddard Space Flight Center and is published by the Wallops Office of Public Affairs, Extension 1584, in the interest of Wallops employees. Recent and past issues of *Inside Wallops* also may be found on the NASA Wallops Flight Facility homepage: www.wff.nasa.gov

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